



STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION

JOHN ELIAS BALDACCI

GOVERNOR

DAVID P. LITTELL

COMMISSIONER

**Perma Treat Corporation
Penobscot County
Mattawamkeag, Maine
A-341-71-L-R/M (SM)**

**Departmental
Findings of Fact and Order
Air Emission License**

After review of the air emissions license application, staff investigation reports and other documents in the applicant's file in the Bureau of Air Quality, pursuant to 38 M.R.S.A., Section 344 and Section 590, the Department finds the following facts:

I. REGISTRATION

A. Introduction

Perma Treat Corporation (Perma Treat) located in Mattawamkeag, Maine has applied to renew their Air Emission License permitting the operation of emission sources associated with their wood products manufacturing facility.

B. Emission Equipment

The following equipment is addressed in this air emission license:

Fuel Burning Equipment

<u>Equipment</u>	<u>Maximum Capacity (MMBtu/hr)</u>	<u>Maximum Firing Rate (ton/hr)</u>	<u>Fuel Type</u>	<u>Stack #</u>
Boiler #1	11.0	1.2	wood waste & RR ties ¹	1
Boiler #2	11.0	1.2	wood waste & RR ties ¹	1
Boiler #3	11.0	1.2	wood waste & RR ties ¹	2
Boiler #4	11.0	1.2	wood waste & RR ties ¹	2

¹Perma Treat fires wood waste from their manufacturing process as well as chipped treated railroad ties.

<u>Equipment</u>	<u>Maximum Capacity (MMBtu/hr)</u>	<u>Maximum Firing Rate (gal/hr)</u>	<u>Fuel Type, % sulfur</u>	<u>Stack #</u>
Generator #1	2.3	16.8	diesel fuel, 0.05%	3
Tub Grinder Diesel Drive ²	6.0	43.9	diesel fuel, 0.05%	4

²Perma Treat has replaced their previous Tub Grinder Diesel Drive with a newer unit.

AUGUSTA

17 STATE HOUSE STATION
AUGUSTA, MAINE 04333-0017
(207) 287-7688 FAX: (207) 287-7826
RAY BLDG., HOSPITAL ST.

BANGOR

106 HOGAN ROAD
BANGOR, MAINE 04401
(207) 941-4570 FAX: (207) 941-4584

PORTLAND

312 CANCO ROAD
PORTLAND, MAINE 04103
(207) 822-6300 FAX: (207) 822-6303

PRESQUE ISLE

1235 CENTRAL DRIVE, SKYWAY PARK
PRESQUE ISLE, MAINE 04769-2094
(207) 764-0477 FAX: (207) 760-3143

C. Application Classification

The modification associated with this renewal will increase emissions by less than 4 ton/year for each single pollutant and less than 8 ton/year for all pollutants combined. Therefore, this license is considered to be a renewal with a minor revision and has been processed through *Major and Minor Source Air Emission License Regulations*, 06-096 CMR 115 (last amended December 24, 2005). With the fuel limits on the boilers and Tub Grinder Diesel Drive and the operating hours restriction on the emergency generator, the facility is licensed below the major source thresholds and is considered a synthetic minor.

II. BEST PRACTICAL TREATMENT (BPT)

A. Introduction

In order to receive a license the applicant must control emissions from each unit to a level considered by the Department to represent Best Practical Treatment (BPT), as defined in *Definitions Regulation*, 06-096 CMR 100 (last amended December 24, 2005). Separate control requirement categories exist for new and existing equipment as well as for those sources located in designated non-attainment areas.

BPT for existing emissions equipment means that method which controls or reduces emissions to the lowest possible level considering:

- the existing state of technology;
- the effectiveness of available alternatives for reducing emissions from the source being considered; and
- the economic feasibility for the type of establishment involved.

B. Boilers #1, #2, #3, #4

All four boilers were originally constructed as dutch oven style boilers. Since 1995, all four boilers have been rebuilt by G & S Mill, Inc. The changes to the boilers include adding twin auger feed systems and multi-zone underfire air grate systems.

All four boilers were originally installed in 1934 and were licensed to fire wood prior to 1989. Therefore, they are not subject to the New Source Performance Standards (NSPS) Subpart Dc for steam generating units greater than 10 MMBtu/hr manufactured after June 9, 1989.

A summary of the BPT analysis for Boilers #1, #2, #3, and #4 (11.0 MMBtu/hr each) is the following:

1. The total fuel use for the facility shall not exceed 21,000 ton/year (12-month rolling total) of wood waste and chipped treated railroad ties combined based on a moisture content of 50%.
2. Perma Treat shall use the following formula, when necessary, to convert fuel use records to 50% moisture:

$$\text{Tons Wood at 50\%} = (\text{Tons Wood at M\%}) \times [(100-M)/50]$$

where M = the moisture content of the actual wood fired

3. *Fuel Burning Equipment Particulate Emission Standard*, 06-096 CMR 103 (last amended November 3, 1990) regulates PM emission limits. However, in this case BPT for PM was determined to be a more stringent limit of 0.25 lb/MMBtu. The PM₁₀ limits are derived from the PM limits.
4. SO₂, NO_x, CO, and VOC emission limits are based on a previous BACT determination.
5. Visible emissions from Stacks #1 and #2 shall each not exceed 30% opacity on a six (6) minute block average, except for no more than two (2) six (6) minute block averages in a continuous 3-hour period.

C. Generator #1

Perma Treat operates one back-up diesel generator. Back-up generators are only to be operated for maintenance purposes and for situations arising from sudden and reasonably unforeseeable events beyond the control of the source. Back-up generators are not to be used for prime power when reliable offsite power is available.

Generator #1 was manufactured prior to April 1, 2006. Therefore, the Generator #1 is not subject to New Source Performance Standards 40 CFR Part 60, Subpart IIII, *Standards of Performance for Stationary Compression Ignition Internal Combustion Engines*.

A summary of the BPT analysis for Generator #1 is the following:

1. Generator #1 shall fire only diesel fuel with a maximum sulfur content not to exceed 0.05% by weight.
2. Generator #1 shall be limited to 500 hr/yr of operation based on a 12 month rolling total. Compliance shall be demonstrated by a written log of all generator operating hours.

3. 06-096 CMR 106 regulates fuel sulfur content, however in this case a BPT analysis for SO₂ determined a more stringent limit of 0.05% was appropriate and shall be used.
4. The PM and PM₁₀ limits are derived from 06-096 CMR 103.
5. NO_x, CO, and VOC emission limits are based upon AP-42 data dated 10/96.
6. Visible emissions from Generator #1 shall not exceed 20% opacity on a six (6) minute block average, except for no more than two (2) six (6) minute block averages in a continuous 3-hour period.

D. Tub Grinder Diesel Drive

Perma Treat replaced its previous Tub Grinder with a CBI 4860H. The Tub Grinder is used for grinding old railroad ties to be used for fuel in the boilers. The Tub Grinder Diesel Drive is a 1999 Caterpillar 3412, 880 Hp at 2100 rpm.

The Tub Grinder Diesel Drive was manufactured prior to April 1, 2006. Therefore, the Tub Grinder Diesel Drive is not subject to New Source Performance Standards 40 CFR Part 60, Subpart IIII, *Standards of Performance for Stationary Compression Ignition Internal Combustion Engines*.

A summary of the BACT analysis for the Tub Grinder Diesel Drive is the following:

1. Total fuel use for the Tub Grinder Diesel Drive shall not exceed 42,000 gal/year of diesel fuel, based on a 12 month rolling total, with a maximum sulfur content not to exceed 0.05% by weight.
2. 06-096 CMR 106 regulates fuel sulfur content, however in this case a BPT analysis for SO₂ determined a more stringent limit of 0.05% was appropriate and shall be used.
3. 06-096 CMR 103 regulates PM emission limits. The PM₁₀ limits are derived from the PM limits.
4. NO_x, CO, and VOC emission limits are based upon AP-42 data dated 10/96.
5. Visible emissions from the Tub Grinder Diesel Drive shall not exceed 20% opacity on a six (6) minute block average, except for no more than two (2) six (6) minute block averages in a continuous 3-hour period.

E. Kilns

Perma Treat operates four drying kilns and processes approximately 350,000 board feet per year of birch, beech, hard maple, soft maple, red oak, and hickory.

Emissions from the kilns have been calculated to be less than 1 ton/year of VOCs. This process is therefore exempt per 06-096 CMR 115, Appendix B and is noted for inventory purposes only.

F. Wood Waste Transfer and Storage

Perma Treat shall not exceed 5% opacity on a six (6) minute block average from the wood waste transfer and collection system and storage areas.

G. Annual Emissions

Perma Treat shall be restricted to the following annual emissions, based on a 12 month rolling total:

Total Licensed Annual Emission for the Facility

Tons/year

(used to calculate the annual license fee)

	PM	PM₁₀	SO₂	NO_x	CO	VOC
Boilers	23.6	23.6	28.4	28.4	92.4	10.5
Generator #1	0.1	0.1	0.1	2.5	0.6	0.2
Tub Grinder Diesel Drive	0.4	0.4	0.2	9.2	2.5	0.3
Total TPY	24.1	24.1	28.7	40.1	95.5	11.0

III. AMBIENT AIR QUALITY ANALYSIS

A. Overview

A refined modeling analysis was performed to show that emissions from Perma Treat, in conjunction with other sources, will not cause or contribute to violations of Maine Ambient Air Quality Standards (MAAQS) for SO₂, PM₁₀, NO₂, CO, Chromium (Cr) and Lead (Pb). While emissions from Perma Treat are slightly below all applicable modeling cutoff values (as defined in 06-096CMR115), MEDEP requested that a modeling demonstration also be performed for non-criteria pollutants, given that Perma Treat uses non-traditional fuels. These non-criteria pollutants, which will be compared to their respective Maine Ambient Air Guideline values (MAAGs), include: Arsenic (As), Cadmium (Cd), Manganese (Mn), Mercury (Hg), Nickel (Ni) and Selenium (Se).

Since no physical modifications or emissions increases are being proposed for Perma Treat, MEDEP has determined that an assessment of Class I Air Quality Related Values (AQRVs) is not required.

Emission parameters for Perma Treat for MAAQS and MAAG modeling are listed in Tables III-2a and 2b, respectively. The emission parameters for criteria pollutants are based on the maximum license allowed (worst-case) operating configuration. For the purposes of determining PM₁₀ and NO₂ impacts, all PM and NO_x emissions were conservatively assumed to convert to PM₁₀ and NO₂, respectively. The emission parameters for metals were based on the very conservative assumption that 100% of the metals in the fuel were emitted from the stack. In reality, a significant portion of the metals likely end up in the bottom ash.

TABLE III-2a : Stack Emission Parameters – Criteria Pollutants

Facility/Stack	Averaging Periods	SO ₂ (g/s)	PM ₁₀ (g/s)	NO ₂ (g/s)	CO (g/s)	Cr (g/s)	Pb (g/s)	Stack Temp (K)	Stack Velocity (m/s)
MAXIMUM LICENSE ALLOWED									
Perma Treat									
• Stack #1	All	0.51	0.70	1.36	1.67	0.0009	0.0028	423.70	3.65
• Stack #2	All	0.51	0.70	1.36	1.67	0.0009	0.0028	423.70	4.61
BASELINE – 1987									
Perma Treat									
It has been determined by MEDEP that Perma Treat does not consume NO _x increment.									
BASELINE – 1977									
Perma Treat									
It has been determined by MEDEP that Perma Treat does not consume SO ₂ or PM ₁₀ increment.									

TABLE III-2b : Stack Emission Parameters – Non-Criteria Pollutants

Facility/Stack	Averaging Periods	As (g/s)	Cd (g/s)	Mn (g/s)	Hg (g/s)	Ni (g/s)	Se (g/s)	Stack Temp (K)	Stack Velocity (m/s)
MAXIMUM LICENSE ALLOWED									
Perma Treat									
• Stack #1	All	0.0004	0.0002	0.0159	0.00002	0.0012	0.0003	423.70	3.65
• Stack #2	All	0.0004	0.0002	0.0159	0.00002	0.0012	0.0003	423.70	4.61

C. Single Source Modeling Impacts

AERMOD-PRIME refined modeling, using 5 years of sequential meteorological data, was performed for three load cases that represented maximum license allowed (worst-case), typical and minimum operating configurations.

The modeling results for Perma Treat alone are shown in Table III-3. Maximum predicted impacts that exceed their respective significance level are indicated in

boldface type. No further modeling was required for pollutant/terrain combinations that did not exceed their respective significance levels.

TABLE III-3 : Maximum AERMOD-PRIME Impacts from Perma Treat Alone

Pollutant	Averaging Period	Max Impact ($\mu\text{g}/\text{m}^3$)	Receptor UTM E (km)	Receptor UTM N (km)	Receptor Elevation (m)	Class II Significance Level ($\mu\text{g}/\text{m}^3$)
SO ₂	3-hour	24.00	551.350	5039.550	123.00	25
	24-hour	11.50	550.650	5040.200	67.00	5
	Annual	1.62	550.700	5040.250	67.00	1
PM ₁₀	24-hour	15.59	550.650	5040.200	67.00	5
	Annual	2.20	550.700	5040.250	67.00	1
NO ₂	Annual	4.30	550.700	5040.250	67.00	1
CO	1-hour	180.35	551.400	5039.450	131.00	2000
	8-hour	70.83	550.450	5040.150	64.00	500
Cr	24-hour	0.022	550.700	5040.200	68.00	none
	Annual	0.003	550.650	5040.150	69.00	none
Pb	24-hour	0.063	550.650	5040.200	67.00	none

D. Combined Source Modeling Impacts

For predicted modeled impacts from Perma Treat alone that exceeded significance levels, as indicated in boldface type in Table III-3, other sources not explicitly included in the modeling analysis must be accounted for by using representative background concentrations for the area.

Background concentrations, listed in Table III-4, are derived from representative rural background data for use in the Eastern Maine region. Important to note is that background data is not available for some criteria and all non-criteria pollutants.

TABLE III-4 : Background Concentrations

Pollutant	Averaging Period	Background Concentration ($\mu\text{g}/\text{m}^3$)	Date
SO ₂	24-hour	13	2003 ¹
	Annual	5	
PM ₁₀	24-hour	42	2001 ²
	Annual	10	1999 ²
NO ₂	Annual	11	1995 ³

Notes:

¹ Robinson Site, Easton

² Background Site, Baileyville

³ TLSP Site, Cape Elizabeth

MEDEP examined other area sources whose impacts would be significant in or near Perma Treat's significant impact area. Due to Perma Treat's location, extent of the significant impact area and nearby source's emissions, MEDEP has determined that no other sources would be considered for combined source modeling.

For pollutant averaging periods that exceeded significance levels, the maximum modeled impacts from the model predicting the highest concentrations were added with conservative rural background concentrations (if applicable) to demonstrate compliance with MAAQS, as shown in Table III-5. Because all pollutant/averaging period impacts using this method meet MAAQS, no further MAAQS modeling analyses need to be performed.

TABLE III-5 : Maximum AERMOD-PRIME Combined Source Impacts – Criteria Pollutants

Pollutant	Averaging Period	Max Impact ($\mu\text{g}/\text{m}^3$)	Receptor UTM E (km)	Receptor UTM N (km)	Receptor Elevation (m)	Back-Ground ($\mu\text{g}/\text{m}^3$)	Max Total Impact ($\mu\text{g}/\text{m}^3$)	MAAQS ($\mu\text{g}/\text{m}^3$)
SO ₂	24-hour	11.50	550.650	5040.200	67.00	13	24.50	230
	Annual	1.62	550.700	5040.250	67.00	5	6.62	57
PM ₁₀	24-hour	15.59	550.650	5040.200	67.00	42	57.59	150
	Annual	2.20	550.700	5040.250	67.00	10	12.20	40
NO ₂	Annual	4.30	550.700	5040.250	67.00	11	15.30	100
Cr	24-hour	0.022	550.700	5040.200	68.00	none	0.022	0.3
	Annual	0.003	550.650	5040.150	69.00	none	0.003	0.05
Pb	24-hour	0.063	550.650	5040.200	67.00	none	0.063	1.5

It is important to note that the maximum predicted lead (Pb) impact was not only below the current Maine MAAQS value of $1.5 \mu\text{g}/\text{m}^3$ (24-hour average) but also USEPA's NAAQS (National Ambient Air Quality Standard) of $0.15 \mu\text{g}/\text{m}^3$ (rolling 3-month average). This new NAAQS for lead became effective January 12, 2009.

The maximum modeled non-criteria pollutant impacts as shown in Table III-6. Because all pollutant/averaging period impacts are at or below their respective MAAG value, no further MAAG modeling analyses need to be performed.

TABLE III-6 : Maximum AERMOD-PRIME Impacts – Non-Criteria Pollutants

Pollutant	Averaging Period	Max Impact ($\mu\text{g}/\text{m}^3$)	Receptor UTM E (km)	Receptor UTM N (km)	Receptor Elevation (m)	MAAGs ($\mu\text{g}/\text{m}^3$)
As	Annual	0.001	550.700	5040.250	67.00	0.002
Cd	Annual	0.0006	550.700	5040.250	67.00	0.006
Mn	Annual	0.05	550.700	5040.250	67.00	0.05
Hg	Annual	0.00006	550.700	5040.250	67.00	0.30
Ni	Annual	0.004	550.700	5040.250	67.00	0.04
Se	Annual	0.001	550.700	5040.250	67.00	20.00

E. Increment

Since it has been determined by MEDEP that Perma Treat does not consume SO_2 , PM_{10} , or NO_2 increment; no Class II increment analysis was required.

F. Class I Impacts

Since no physical modifications or emissions increases are being proposed for Perma Treat, MEDEP has determined that an assessment of Class I Air Quality Related Values (AQRVs) is not required.

G. Summary

In summary, it has been demonstrated that Perma Treat in its proposed configuration will not cause or contribute to a violation of any SO_2 , PM_{10} , NO_2 , CO, Chromium and Lead averaging period MAAQS nor exceed any MAAG values for As, Cd, Mn, Hg, Ni and Se.

ORDER

Based on the above Findings and subject to conditions listed below, the Department concludes that the emissions from this source:

- will receive Best Practical Treatment,
- will not violate applicable emission standards,
- will not violate applicable ambient air quality standards in conjunction with emissions from other sources.

The Department hereby grants Air Emission License A-341-71-L-R/M subject to the following conditions.

Severability. The invalidity or unenforceability of any provision, or part thereof, of this License shall not affect the remainder of the provision or any other provisions. This License shall be construed and enforced in all respects as if such invalid or unenforceable provision or part thereof had been omitted.

STANDARD CONDITIONS

- (1) Employees and authorized representatives of the Department shall be allowed access to the licensee's premises during business hours, or any time during which any emissions units are in operation, and at such other times as the Department deems necessary for the purpose of performing tests, collecting samples, conducting inspections, or examining and copying records relating to emissions (38 M.R.S.A. §347-C).
- (2) The licensee shall acquire a new or amended air emission license prior to commencing construction of a modification, unless specifically provided for in Chapter 115. [06-096 CMR 115]
- (3) Approval to construct shall become invalid if the source has not commenced construction within eighteen (18) months after receipt of such approval or if construction is discontinued for a period of eighteen (18) months or more. The Department may extend this time period upon a satisfactory showing that an extension is justified, but may condition such extension upon a review of either the control technology analysis or the ambient air quality standards analysis, or both. [06-096 CMR 115]
- (4) The licensee shall establish and maintain a continuing program of best management practices for suppression of fugitive particulate matter during any period of construction, reconstruction, or operation which may result in fugitive dust, and shall submit a description of the program to the Department upon request. [06-096 CMR 115]
- (5) The licensee shall pay the annual air emission license fee to the Department, calculated pursuant to Title 38 M.R.S.A. §353. [06-096 CMR 115]
- (6) The license does not convey any property rights of any sort, or any exclusive privilege. [06-096 CMR 115]
- (7) The licensee shall maintain and operate all emission units and air pollution systems required by the air emission license in a manner consistent with good air pollution control practice for minimizing emissions. [06-096 CMR 115]
- (8) The licensee shall maintain sufficient records to accurately document compliance with emission standards and license conditions and shall maintain such records

for a minimum of six (6) years. The records shall be submitted to the Department upon written request. [06-096 CMR 115]

- (9) The licensee shall comply with all terms and conditions of the air emission license. The filing of an appeal by the licensee, the notification of planned changes or anticipated noncompliance by the licensee, or the filing of an application by the licensee for a renewal of a license or amendment shall not stay any condition of the license. [06-096 CMR 115]
- (10) The licensee may not use as a defense in an enforcement action that the disruption, cessation, or reduction of licensed operations would have been necessary in order to maintain compliance with the conditions of the air emission license. [06-096 CMR 115]
- (11) In accordance with the Department's air emission compliance test protocol and 40 CFR Part 60 or other method approved or required by the Department, the licensee shall:
 - A. perform stack testing to demonstrate compliance with the applicable emission standards under circumstances representative of the facility's normal process and operating conditions:
 - 1. within sixty (60) calendar days of receipt of a notification to test from the Department or EPA, if visible emissions, equipment operating parameters, staff inspection, air monitoring or other cause indicate to the Department that equipment may be operating out of compliance with emission standards or license conditions; or
 - 2. pursuant to any other requirement of this license to perform stack testing.
 - B. install or make provisions to install test ports that meet the criteria of 40 CFR Part 60, Appendix A, and test platforms, if necessary, and other accommodations necessary to allow emission testing; and
 - C. submit a written report to the Department within thirty (30) days from date of test completion.[06-096 CMR 115]
- (12) If the results of a stack test performed under circumstances representative of the facility's normal process and operating conditions indicate emissions in excess of the applicable standards, then:
 - A. within thirty (30) days following receipt of such test results, the licensee shall re-test the non-complying emission source under circumstances representative of the facility's normal process and operating conditions and in accordance with the Department's air emission compliance test protocol and 40 CFR Part 60 or other method approved or required by the Department; and
 - B. the days of violation shall be presumed to include the date of stack test and each and every day of operation thereafter until compliance is demonstrated under normal and representative process and operating conditions, except to

the extent that the facility can prove to the satisfaction of the Department that there were intervening days during which no violation occurred or that the violation was not continuing in nature; and

- C. the licensee may, upon the approval of the Department following the successful demonstration of compliance at alternative load conditions, operate under such alternative load conditions on an interim basis prior to a demonstration of compliance under normal and representative process and operating conditions.

[06-096 CMR 115]

- (13) Notwithstanding any other provisions in the State Implementation Plan approved by the EPA or Section 114(a) of the CAA, any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of any statute, regulation, or Part 70 license requirement. [06-096 CMR 115]
- (14) The licensee shall maintain records of malfunctions, failures, downtime, and any other similar change in operation of air pollution control systems or the emissions unit itself that would affect emission and that is not consistent with the terms and conditions of the air emission license. The licensee shall notify the Department within two (2) days or the next state working day, whichever is later, of such occasions where such changes result in an increase of emissions. The licensee shall report all excess emissions in the units of the applicable emission limitation. [06-096 CMR 115]
- (15) Upon written request from the Department, the licensee shall establish and maintain such records, make such reports, install, use and maintain such monitoring equipment, sample such emissions (in accordance with such methods, at such locations, at such intervals, and in such a manner as the Department shall prescribe), and provide other information as the Department may reasonably require to determine the licensee's compliance status. [06-096 CMR 115]

SPECIFIC CONDITIONS

- (16) **Boilers #1, #2, #3, #4**

- A. Total fuel use for the boilers shall not exceed 21,000 tons/yr at 50% moisture (or equivalent) of wood waste and chipped railroad ties. Records of annual fuel use shall be kept on a 12-month rolling total basis. [06-096 CMR 115, BPT]

B. Emissions shall not exceed the following:

Emission Unit	Pollutant	lb/MMBtu	Origin and Authority
Boiler #1	PM	0.25	06-096 CMR 115, BPT
Boiler #2	PM	0.25	06-096 CMR 115, BPT
Boiler #3	PM	0.25	06-096 CMR 115, BPT
Boiler #4	PM	0.25	06-096 CMR 115, BPT

C. Emissions shall not exceed the following [06-096 CMR 115, BPT]:

Emission Unit	PM (lb/hr)	PM ₁₀ (lb/hr)	SO ₂ (lb/hr)	NO _x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Boiler #1	2.75	2.75	3.30	3.30	10.75	1.22
Boiler #2	2.75	2.75	3.30	3.30	10.75	1.22
Boiler #3	2.75	2.75	3.30	3.30	10.75	1.22
Boiler #4	2.75	2.75	3.30	3.30	10.75	1.22

D. Visible emissions from the boiler stacks #1 and #2 shall each not exceed 30% opacity on a six (6) minute block average, except for no more than two (2) six (6) minute block averages in a continuous 3-hour period. [06-096 CMR 101]

E. For each quarter for the next two years in which chipped railroad ties are fired in any boiler, Perma Treat shall perform fuel sampling on a quarterly basis for the following compounds: Antimony, Arsenic Cadmium, Chromium III, Chromium VI, Copper, Lead, Mercury, Nickel, Selenium, Vanadium, and Chlorine. Results of fuel sampling shall be submitted to the Department within 30 days of the end of each quarter. [06-096 CMR 115, BPT]

(17) **Generator #1**

A. Perma Treat shall limit Generator #1 to 500 hr/yr of operation (based on a 12 month rolling total). An hour meter shall be maintained and operated on the Back-up Generator. [06-096 CMR 115, BPT]

B. Generator #1 shall only to be operated for maintenance purposes and for situations arising from sudden and reasonably unforeseeable events beyond the control of the source. Generator #1 shall not to be used for prime power

when reliable offsite power is available. A log shall be maintained documenting the date, time, and reason for operation. [06-096 CMR 115, BPT]

- C. Generator #1 shall fire diesel fuel with a sulfur limit not to exceed 0.05% by weight. Compliance shall be based on fuel records from the supplier showing the quantity of fuel delivered and the percent sulfur of the fuel. [06-096 CMR 115, BPT]

- D. Emissions shall not exceed the following:

Emission Unit	Pollutant	lb/MMBtu	Origin and Authority
Generator #1	PM	0.12	06-096 CMR 115, BPT

- E. Emissions shall not exceed the following [06-096 CMR 115, BPT]:

Emission Unit	PM (lb/hr)	PM ₁₀ (lb/hr)	SO ₂ (lb/hr)	NO _x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Generator #1	0.28	0.28	0.12	10.14	2.19	0.81

- F. Visible emissions from Generator #1 shall not exceed 20% opacity on a six (6) minute block average, except for no more than two (2) six (6) minute block averages in a continuous 3-hour period. [06-096 CMR 101]

(18) **Tub Grinder Diesel Drive**

- A. Fuel use for the Tub Grinder Diesel Drive shall not exceed 42,000 gal/year of diesel fuel (based on a 12 month rolling total) with a maximum sulfur content not to exceed 0.05% by weight. Fuel records, including gallons used and percent sulfur, shall be maintained on a monthly basis in addition to the 12 month rolling total. [06-096 CMR 115, BACT]

- B. Emissions shall not exceed the following:

Emission Unit	Pollutant	lb/MMBtu	Origin and Authority
Tub Grinder Diesel Drive	PM	0.12	06-096 CMR 103(2)(B)(1)(a)

C. Emissions shall not exceed the following [06-096 CMR 115, BACT]:

Emission Unit	PM (lb/hr)	PM ₁₀ (lb/hr)	SO ₂ (lb/hr)	NO _x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Tub Grinder Diesel Drive	0.72	0.72	0.31	19.23	5.11	0.54

D. Visible emissions from the Tub Grinder Diesel Drive shall not exceed 20% opacity on a six (6) minute block average, except for no more than two (2) six (6) minute block averages in a continuous 3-hour period. [06-096 CMR 101]

(19) **Wood Waste Transfer and Storage**

Visible emissions from the wood waste transfer and storage area shall not exceed an opacity of 5% on a six (6) minute block average basis. [06-096 CMR 115, BPT]

(20) **Annual Emission Statement**

In accordance with *Emission Statements*, 06-096 CMR 137 (last amended November 8, 2008), the licensee shall annually report to the Department the information necessary to accurately update the State's emission inventory by means of:

- 1) A computer program and accompanying instructions supplied by the Department; or
- 2) A written emission statement containing the information required in 06-096 CMR 137.

Reports and questions should be directed to:

Attn: Criteria Emission Inventory Coordinator
Maine DEP
Bureau of Air Quality
17 State House Station
Augusta, ME 04333-0017 Phone: (207) 287-2437

The emission statement must be submitted as specified by the date in 06-096 CMR 137.

Perma Treat Corporation
Penobscot County
Mattawamkeag, Maine
A-341-71-L-R/M

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Departmental
Findings of Fact and Order
Air Emission License

- (21) Perma Treat shall notify the Department within 48 hours and submit a report to the Department on a quarterly basis if a malfunction or breakdown in any component causes a violation of any emission standard (Title 38 MRSA §605).

DONE AND DATED IN AUGUSTA, MAINE THIS 8th DAY OF April 2009.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: James P. Brophy
DAVID P. LITTELL, COMMISSIONER

The term of this license shall be five (5) years from the signature date above.

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: 11/2/05

Date of application acceptance: 11/3/05

Date filed with the Board of Environmental Protection: _____

This Order prepared by Lynn Ross, Bureau of Air Quality.

